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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,804	10/16/2003	Christophe F. Bas	0508015-0032	9638

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Choate, Hall & Stewart
Exchange Place
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Boston, MA 02109

EXAMINER

GREGORY, BERNARR E

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,804

Applicant(s)

BAS, CHRISTOPHE F. 

Examiner

Bernarr E. Gregory

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16/10/03 & 29/1/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Please note these hyperlinks at the top of page 5 of the Specification and in the first full paragraph on page 8 of the Specification.

2. The incorporation of essential material in the specification by reference to a foreign application or patent, **or to a publication is improper**. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

3. The attempt to incorporate subject matter into this application by reference to publications is improper because they are non-patent literature.

Essential subject matter may only be incorporated into a patent or patent application by reference to another United States Patent or United States Patent application. Please see the improper incorporations by reference on pages 4-5 and 8 of the Specification. Correction is hereby **required**.

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It indicates that foreign priority is claimed by the checking of two boxes on the declaration, but there is no information listed to identify a foreign application from which this priority is claimed. Correction is hereby **required**.

5. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout claims 1-29, the uses of the term “omni-directional topology” are indefinite and unclear in context. It is not clear from the context what is meant, and it is not clear from the specification what is meant by this term. Please see 37 CFR §1.75(d)(1).

Throughout claims 1-29, the uses of the term “miniature” make the claims indefinite and unclear in that the term “miniature” is a relative term and there is no specified standard of reference by which to ascertain its meaning. For example, “miniature” could be defined as smaller than 1 centimeter in length or smaller than 1 micrometer in length or any other standard desired.

In claim 1, the phrase “adapted for orientation independent of any adjacent reflective structures” is indefinite and unclear in context.

In claim 1, the preamble presents the claim as being directed to "A corner reflector" (i.e., a single corner reflector), but this seems to be at odds with an "omni-directional topology" and so is unclear in context.

On line 5 of independent claim 7, the phrase "oriented independently of one another" is indefinite and unclear in context in that the plain meaning of the phrase would indicate that there was no relationship at all between the two or more reflective structures, but they are claimed as forming part of an "array," which indicates that there is some sort of relationship between the members of the array. The same problem occurs in independent claim 14 with respect to the phrase "oriented independently of one another," but the reflective structures are bound together as part of a "reflective article."

In independent claim 21, the phrase "oriented independently of surrounding reflectors" is indefinite and unclear in context. Please note that this language would necessitate a closed-form solid in order for all reflectors to have "surrounding reflectors."

Dependent claims 2-6, 8-13, 15-20, 22-29 are unclear in that they depend from unclear independent claims 1, 7, 14, and 21.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1, 7, 14, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Matosian ('236) or Harris ('355) or Edwards ('060) or Brauer ('790) or Brauer ('804) or Rockwood ('093) or Pratt et al ('675) or Norwood ('035).

Using independent claim 1 as exemplary, each of the applied references plainly shows a reflector with an "omni-directional topology" (i.e., it is spherical) which is made up of a plurality of reflectors that are pointed in independent directions and that reflect incident electromagnetic radiation back in the direction from which it came. In Pratt et al ('675), please note in column 1 that the device is "compact" (i.e., miniature). Also, please note in Rockwood ('093), that the device is "omnidirectional" (end of the first paragraph of the column). The single-step method of independent claim 21 would be inherent in the making of any of the devices of the applied references.


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner-cited prior art that has not been applied above is of general interest as being directed to EM, most of them being omnidirectional. Please especially note in the German reference (Gubela ('680)) that the reflectors are very small, the elements being less than 1 millimeter in diameter.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (703) 306-5765. The examiner can normally be reached on weekdays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (703) 306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Bernarr E. Gregory
Primary Examiner
Art Unit 3662